

Year 2001 Progress Report of Activities

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Rose Lake Plant Materials Center

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Who We Are

The Rose Lake Plant Materials Center (PMC) is a branch of the United States Department of Agriculture, Natural Resources Conservation Service. It is one of 26 plant materials centers located throughout the United States. The Center is located near East Lansing, MI. Areas served include Indiana, Michigan, Ohio, Wisconsin, and portions of Illinois, Minnesota, Pennsylvania and New York.

What We Do

It is our mission to use plant materials and state-ofthe-art plant science technology to solve natural resource problems and meet the objectives of environmental programs. Our program emphasizes using native plants. We develop, test and release superior adapted plants to commercial growers along with production and management technology. Our mission addresses five major objectives:

- Water Quality Maintenance and Improvement
- Erosion Control
- Forage and Pasture Improvement
- Wildlife Habitat Improvement
- Restoration of Native Habitats

A brief summary of year 2001 accomplishments follows. For a complete account of activities, request the Annual Technical Report.

Four Warm Season Grasses Released



Southlow Michigan Germplasm Big bluestem,
Southlow Michigan Germplasm Indiangrass,
Southlow Michigan Germplasm Switchgrass and
Southlow Michigan Germplasm Little bluestem
have been released as source identified releases.
These plants were collected in partnership with
Michigan Department of Natural Resources
(MDNR) in Southern Lower Michigan.
The PMC staff has been working with Michigan
Association of Conservation Districts and MDNR to
develop these native seed sources, along with the
necessary establishment and production technology.
Interested growers should contact David Burgdorf,
Plant Materials Specialist for an application.

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Meet the Staff



L to R: Elaine Gerona, Office Assistant, Sergio Perez, Biological Science Technician, David Burgdorf, Plant Materials Specialist, John Rissler, Plant Materials Center Manager, Tony Bush, Agronomist

Canada Wildrye Study



A collection of Canada wildrye has been assembled from native stands in Michigan, Indiana, Ohio, and Wisconsin. Material is being evaluated for restoration, revegetation, conservation cover and streambank protection in the Great Lakes and Midwest states. Those collecting the material include: Ken Collins, IN, Keith Zygowicz, WI, T.J. Huffman, WI, Terry Schaedig, MI, Ken McWilliams, IN, Bill Veldt, IN, David Burgdorf, MI, Greg Gerke, IN and Connie Whittier, WI. The plants were planted in the greenhouse then transplanted into the field. Selection and release is anticipated in two years.

Tribal Field Plantings

The Rose Lake Plant Materials Center is working with tribes to help them increase and repopulate depleted tribal stands of Sweetgrass, White Sage, Sweet Flag, Indian Tobacco, and Black Ash. Over this past year, the Rose Lake PMC has supplied plants for studies and evaluations to 16 American Indian groups in Michigan, Ohio, Indiana, Wisconsin and Minnesota.



2001 Collections

We would like to thank all of the people who have collected seed/cuttings of Canada wilrye (Elymus canadensis), Virginia Wildrye (Elymus virginicus), Bottlebrush grass (Hystrix patula), Black ash (Fraxinus nigra), Riverbank wildrye (elymus riparius), Prairie sandreed (Calamovilfa longifolia), Canada brome (Bromus pubescens) and Canada bluejoint (Calamagrostis canadensis) for the Plant Materials Center this year. From Indiana: Ken Mc Williams, Darrell McGriff, Doris Scully, Ken Collins, Karen Hauer, Greg Gerke, Jim Schwanke and Mike Hughes. From Michigan: Bruce Warren, Vern Stevens, Darren Silkworth, Perry Smeltzer, Zach Cooley, and Kathy Evans. From Wisconsin: Tom Cogger, Dexter Porter and the Wisconsin Plant Materials Committee.

Vegetative Barriers



Vegetative barriers are narrow rows of stiff, densely tillered, perennial grass planted in parallel lines across the dominant slope or concentrated flow areas of a field. This technology has shown promise as an erosion control measure on row crop fields were crop residues are insufficient to inhibit the flow of water during runoff events. Where runoff concentrates in rills or ephemeral gullies the grass barriers will pond water upslope. This will cause a large part of the sediment load to settle, thus filling the gullies and creating a series of benched terraces. The benched terraces will, in turn, interrupt the slope length and diffuse the flow of runoff, limiting further erosion and increasing water absorption.



Vegatative barrier installation

We are currently looking at two species, miscanthus and eastern gamagrass, that have good potential for use as barrier material. Last year two field plantings were established in Ohio. A miscanthus planting was made on the Kemp Farm in Peeble County and in Fayette County. Eastern gamagrass was used on the Mavis Farm. We also transplanted

nearly 600 feet of miscanthus barrier on a field at the Kellogg Biological Station near Battle Creek, MI. An additional 200 feet will be planted there this year, as well as 60 feet of eastern gamagrass at the Feldun-Purdue Agricultural Center in Indiana.

There is a National Standard for Vegetative Barrier, (601) no species are currently approved for the practice in the Great Lakes States. These field plantings and evaluations will determine species for the practice in the next couple of years.

Reimbursable Agreements:



Apostle Island National Lake Shore, Raspberry Island Lighthouse

We are working in Partnerships with the National Parks Service and MDNR. The PMC facilities and expertise are being used to help our partners preserve and conserve the parks native ecosystems. There are currently three agreements; Apostle Islands National Lake Shore, Bayfield, WI, Isle Royale National Park, MI and Grand Mere State Park, MI. These projects include invasive species control and management, site restoration plans, native species propagation, bioengineering to save a lighthouse, writing of a native plant propagation manual and shallow root planting technology development.

These agreements have helped the Parks and the PMC program the last several years to meet the objectives of NRCS. The reports and plant propagation techniques will be available from NRCS for public use. The PMC is always looking for new partnerships that will help in getting conservation plants on the landscape.

Material Available to Growers:

- 'Indigo' silky dogwood
- 'Lancer' perennial pea
- 'Magenta' hybrid crabapple
- 'Roselow' sargent crabapple
- 'Ímperial' Carolina poplar
- 'Affinity' northern white cedar

Leelanau Germplasm highbush cranberry

Southlow Michigan Germplasm little bluestem

Southlow Michigan Germplasm big bluestem

Southlow Michigan Germplasm indiangrass

Southlow Michigan Germplasm switchgrass

Web sites:

http://Plant-Materials.nrcs.usda.gov http://plants.usda.gov

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